

ABSTRACT OF THE DISCLOSURE

A decoding device compares the number of errors estimated from input data syndromes by an error number estimation section with the number of errors computed by an error number computation section during decoding process, performs error correction by an error correction section based on this comparison result and the input data syndromes, performs a syndrome computation for error corrected data by a syndrome computation section again to obtain corrected data syndromes, and outputs input data as second corrected data when erroneous correction is performed or the estimated number of errors differs from the computed number of errors.